



DIVISION OF FIRE SAFETY

OFFICE OF THE STATE FIRE MARSHAL, STATE FIRE ACADEMY AND THE STATE HAZ-MAT TEAM

FIRE SAFETY NEWS



Inside this issue:

Directors Message	1
Seasonal Safety	3
Hazmat Notes	4
Fire & Building Safety Code	5
Fireworks Safety	6
Calendar of Fire Events	8
Contact Information	9

Upcoming Board meetings

Plumbing Board Meeting:
July 12, 2016, 9AM

Access Board Meeting:
July 25, 2016 1:30PM

Electrical Board Meeting:
August 2, 2016 9AM

Elevator Board Meeting:
August 9, 2016 9AM

Access Board Meeting:
August 29, 2016 1:30PM

**It's Time to
Keep Your
NFIRS
Reports
Up-to-Date!**

July 2016

Directors Message

Michael Desrochers

Jim Litevich, Chief of Fire Service Training is retiring effective June 24, 2016 after 15 years of service. Until the position is filled Michael Skaza will be the point of contact for all academy related issues. Several weeks ago I provided a memo to the entire fire service community reflecting on Jim's accomplishments during his tenure.

Erin Walker starts employment at the fire academy Monday June 27, 2016. Erin was hired to replace Eileen McGee. If you are in the area please stop in and introduce yourself.

The Fire Academy is in the initial stage of applying for re-accreditation to the pro-board. This process will include a site visit later this fall by representatives of the pro-board. The pro-board will review and examine our policies, procedures, systems, standards, curriculum design, course delivery and business process. Re-certification is required every 5 years.

Fire Safety has submitted the rule package to adopt the 2015 Life Safety Code and 2015 IBC. Division staff has worked hard in reviewing the new standards and we have tried to address numerous issues which have created controversy over the years. Attached is the annotated version of the new rule proposal showing deletions and additions to the code. Public hearings are scheduled at the following locations;

Division of Fire Safety – Berlin Central Office

1311 U.S. Route 302 – Berlin, VT

Date: Tuesday – July 26, 2016

Time: 10am

Division of Fire Safety – Rutland Regional Office

56 Howe Street – Rutland, VT

Date: Wednesday - July 27, 2016

Time: 10am

Deadline for written comment submittal is August 5, 2016. Written comments can be sent to Bob Patterson at Vermont Division of Fire Safety – 1311 U.S. Route 302 – Barre, VT 05641, or email to robert.patterson@vermont.gov

http://firesafety.vermont.gov/sites/firesafety/files/files/rules/dfs_rules_buildingcode_annotated2015.pdf

Carbon Monoxide

The Silent Killer

Carbon monoxide (CO) is called the silent killer because this gas is odorless, colorless, and is toxic at relatively low concentrations. Several hundred people die each year in the US for unintentional CO exposure, and several thousand are hospitalized. Carbon monoxide is produced by the incomplete combustion of various fuels, including wood, charcoal, oil, kerosene, propane and natural gas. Internal combustion engines also create carbon monoxide in quantities that can be extremely hazardous.

Exposure to carbon monoxide interferes with the body's ability to transport oxygen, and can mimic flu-like symptoms at low to moderate levels. These symptoms can include headache, fatigue, shortness of breath, nausea and dizziness. At higher levels of exposure, progressively more severe symptoms can occur, including mental confusion, vomiting, unconsciousness and ultimately death. Symptom severity is related to the level of CO exposure, and the length of time of exposure. Pre-existing health conditions and age can also influence individual response to CO.

Concentration	Symptoms
35 ppm (0.0035%)	Headache and dizziness within six to eight hours of constant exposure
100 ppm (0.01%)	Slight headache in two to three hours
200 ppm (0.02%)	Slight headache within two to three hours; loss of judgment
400 ppm (0.04%)	Frontal headache within one to two hours
800 ppm (0.08%)	Dizziness, nausea, and convulsions within 45 min; insensible within 2 hours
1,600 ppm (0.16%)	Headache, increased heart rate , dizziness, and nausea within 20 min; death in less than 2 hours
3,200 ppm (0.32%)	Headache, dizziness and nausea in five to ten minutes. Death within 30 minutes.
6,400 ppm (0.64%)	Headache and dizziness in one to two minutes. Convulsions, respiratory arrest, and death in less than 20 minutes.
12,800 ppm (1.28%)	Unconsciousness after 2–3 breaths. Death in less than three minutes.

CO alarms are reliable devices that provide excellent protection from elevated levels of carbon monoxide. They are designed to sound an alarm when elevated levels of CO are present, but before any symptoms of CO poisoning occur. CO alarms should be located outside of sleeping areas in all homes, to awaken sleeping occupants to any exposure. CO alarms should be labeled as complying with ANSI/UL 2034.

Vermont has high regulatory standards for CO alarms in all buildings where people sleep. These requirements resulted from a long history of CO incidents, with Act 19 prompted by the 2005 Redstone Campus incident, where one person died and several were hospitalized from CO. Single family homes built or sold after July 1, 2005 are required to have CO alarms outside of sleeping rooms, while all other residential buildings must have CO alarms, as mandated by the state-wide building safety code.

Submitted by Bruce Martin,
Assistant State Fire Marshal

IMPORTANT NOTICE

Effective July 1, 2016 the fee for all Permit Applications will increase to \$8.00 per \$1,000 of the total construction value. This increase applies to applications for Construction, Sprinkler, Suppression, Fire Alarm, Hood, Underground Piping, Tents, and Tanks.

The minimum fee remains at \$50.00 (projects where the total construction cost is less than \$6,250). The maximum application fee that can be paid remains at \$185,000 (projects where the total construction cost is over \$23,125,000).

New applications can be found on the DFS webpage: <http://firesafety.vermont.gov/buildingcode/permits>. These new applications must be used for all projects submitted on or after July 1, 2016. If you have the old/current applications saved electronically or printed out, please replace them with the new applications after the first of July.

The fees for Electrical and Plumbing Work Notices and Licensing and Certification will not change.

Proposed Vermont Fire and Building Safety Code – 2015 Public Hearing Schedule

Location: Division of Fire Safety – Berlin Central Office

1311 U.S. Route 302 – Berlin, VT

Date: Tuesday – July 26, 2016

Time: 10am

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Don't Wait — Check the Date!

Replace Smoke Alarms Every 10 Years



Fire Prevention Week
Oct. 9-15, 2016

Age matters when it comes to your smoke alarms.
Check the manufacture dates on your smoke alarms today!

1

Remove the smoke alarm from the wall or ceiling.



October 6, 2016



2

Look at the back of the alarm for the date of manufacture.

3

Smoke alarms should be replaced 10 years from the date of manufacture.



4

Put the alarm back on the ceiling or wall if it is less than 10 years old.



A closed door may slow the spread of smoke, heat and fire.



Test smoke alarms at least once a month by pushing the test button.



If the smoke alarm sounds, get outside and stay outside. Go to your outside meeting place.



Install smoke alarms in every sleeping room and outside each separate sleeping area. For the best protection, make sure all smoke alarms are interconnected. When one sounds, they all sound.



Call the fire department from a cellphone or a neighbor's phone. Stay outside until the fire department says it's safe to go back inside.

For more information about smoke alarms, visit usfa.fema.gov and firepreventionweek.org.

U.S. Fire
Administration



FEMA





Hazmat Training: Preparing for the Worst

There is an old saying among the firefighter community: "Train as if your life depends on it, because it *does*." Training can mean the difference between life and death, particularly when it comes to hazardous materials. Knowing what to expect and being familiar with your personal protective equipment will ensure you are prepared for day one of your training. Ultimately, preparation leads to peace of mind when operating at a Hazmat Incident.

Types of Hazmat Training

There are several levels of hazardous waste operations and emergency response ("Hazwoper") training. Departments within the State of Vermont, with exception of a very few, train to the Operations Level. The requirements for this level can be found in OSHA 1910.120, which stresses competency above all.

At the First Operations Responder level, you must be able to properly identify a hazardous incident, prevent the substance from spreading, and make the appropriate notification to your team.

Responders who are members of the State of Vermont Hazardous Materials Response Team receive training one step above First Responder Operations -- the Technician level. This is the minimum level required for all hazmat team responders who will be handling chemical substances. Technicians require a solid understanding of basic chemical and toxicological behavior they will use to stop the spread of hazardous substances. Core competencies include performing advanced control and containment operations while using PPE. Ultimately, technicians must successfully implement decontamination and termination procedures.

Hands On, Suits On

Both Operations Level and Technician Level responders are trained in selection of PPE, donning and doffing of the selected PPE.

Typically, responders can expect to be inside the suit for about 30 minutes (approximately 30 minutes working time and 10 minutes during decontamination). Emergency response personnel often find the humidity inside their suits causes their visors to fog. To fight the fog, a towel can be taped to your helmet inside the suit which can be used to clear your visor of condensation.

Pre and Post medical monitoring and hydration is vital for responders who will be donning PPE.

Maneuverability is a key point of concern when it comes to working in your hazmat suit. Proper size selection is critical.

Monitoring and Detection

As a responder you must be familiar with atmospheric monitoring and detection. Responders need to know how to properly utilize their Multi gas meters, to ensure their safety. The more hands on training with these devices, the more comfortable and knowledgeable the responder is with their use.

Bump testing of these meters prior to use and after use is very important, as a way to ensure the meter is ready for operation, and the readings received are accurate.

Staying Fresh

As with any training, it is important to refresh and test your knowledge continually. At your department, have refresher training, at a minimum annually, in which you cover each topic thoroughly. Most importantly, continually incorporate hands-on exercise to reinforce and test our knowledge of the material that is covered. This training should conclude with a written exam, verify knowledge of the subject matter.

Additionally, each person should don chemical protective clothing and perform a variety of tasks, such as those they would be expected to perform.

Continued on next page

The State of Vermont Hazardous Materials Response Team does offer the following refresher courses;

Hazardous Materials Awareness
Hazardous Materials Operations
Air Monitoring
Decontamination
Compressed Natural Gas
Ethanol and Foam

The link below will allow you access to our webpage, which has the course request form, if you are interested in hosting one of these course for your department or County Mutual Aid Departments.

<http://firesafety.vermont.gov/emergency/hazmat/training>

Todd J. Cosgrove
Chief, VT Hazardous Materials Response Team
State Tier II Program Manager

New Plan Reviewer for Williston Regional Office

Please help us welcome Robert Dombrowski to the Division.

Robert is excited to be part of the Division of Fire Safety and share his knowledge and expertise. He has been working for the past 8 years as a Fire Protection Engineer/Project Manager for Jensen Hughes. Jensen Hughes is a global company and one of the largest fire protection and life safety engineering and consulting firms with offices worldwide. His primary focus is building, fire and life safety code consulting. His experience with fire protection and life safety expands a wide range of types and sizes of facilities. Experience includes inspections, engineering calculations, evaluations and analysis for active and passive fire protection features. As a contractor Robert has worked for the Department of Defense and the Architect of the Capitol in Washington D.C. For the past 3 years Robert has been managing Jensen Hughes's South Carolina office located at V.C. Summer Nuclear Station. Robert also has a background as a Volunteer Fire Fighter for 15 years and holds a Journeyman's license in Heating, Ventilation, and Air Conditioning from the State of Maryland. Please help us in welcoming Robert (Rob) to the Division.



Fireworks

Each July 4th, thousands of people, most often children and teens, are injured while using consumer fireworks.

Despite the dangers of fireworks, few people understand the associated risks - devastating burns, other injuries, fires, and even death.

The [Alliance to Stop Consumer Fireworks](#) is a group of health and safety organizations, coordinated by NFPA, that urges the public to avoid the use of consumer fireworks and instead, to enjoy displays of fireworks conducted by trained professionals.



Leave fireworks to the professionals. Do not use consumer fireworks. Read all of NFPA's fireworks safety tips and [download our free customizable safety tip sheet](#). (PDF, 679 KB)

Fireworks by the numbers

In 2011, fireworks caused an estimated 17,800 reported fires, including 1,200 total structure fires, 400 vehicle fires, and 16,300 outside and other fires. These fires resulted in an estimated 40 civilian injuries and \$32 million in direct property damage. The Consumer Products Safety Commission has released its report on "[Fireworks-Related Deaths, Emergency Department-Treated Injuries, and Enforcement Activities During 2014](#)".

- In 2013, U.S. hospital emergency rooms treated an estimated 11,400 people for fireworks related injuries; 55% of those injuries were to the extremities and 38% were to the head.
- The risk of fireworks injury is highest for young people ages 0-4, followed by children 10-14.
- On July 4th in a typical year, far more U.S. fires are reported than on any other day, and fireworks account for two out of five of those fires, more than any other cause of fires.
- Source: NFPA's [Fireworks report](#), by John R. Hall, Jr., June 2013 and NFPA's [Fireworks Fact Sheet](#), Fire Analysis and Research Division, June 2015



News story underscores the importance of replacing smoke alarms every 10 years (and this year's Fire Prevention Week theme!)

Blog Post created by [Susan McKelvey](#) 

Smoke alarms need to be replaced every 10 years - that was the key message behind a news story that aired yesterday on KDKA-TV, Pittsburgh's CBS news affiliate. It also happens to be the theme for this year's Fire Prevention Week campaign, "Don't Wait - Check the Date! Replace Smoke Alarms Every 10 Years", October 9-15.

While smoke alarms can make the difference between life and death in a home fire, they need to be working properly, and that means replacing them every 10 years. To find out how old a smoke alarm is, check the date on the back of the alarm. The smoke alarm should be replaced 10 years from that date.

Kudos to KDKA-TV for covering this important message in a compelling, accurate manner. We encourage fire departments planning to promote Fire Prevention Week in their communities to consider this news story as a great example of how local news outlets can cover this year's theme. Our Fire Prevention Week website offers a wealth of related resources and information - make sure to check them out!

Carbon monoxide alarm alerts residents to hazardous grilling mistake

Blog Post created by [Lisa Braxton](#) 

A carbon monoxide (CO) alarm alerted two Madison, Wisconsin, residents to a potentially life-threatening situation earlier this week.

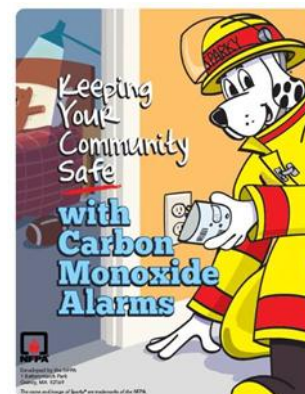
According to the [Wisconsin State Journal](#), firefighters found out the couple had used two charcoal grills a few hours earlier and put the grills in their garage, under the apartment. "The couple called 911 after their alarm went off twice, but then fell silent," said Madison Fire Department spokesperson Cynthia Schuster.

Firefighters put on breathing apparatus to enter the garage where they found high CO levels and one charcoal grill still smoldering.

CO is a gas you cannot see, taste, or smell. It is often called "the invisible killer," and is created when fossil fuels, such as kerosene, gasoline, coal, natural gas, propane, methane, or wood, do not burn completely.

Fire officials say that firefighters opened the garage door and brought the grills out. Once the CO reading fell to zero, the residents were allowed back into their apartment.

NFPA's [community toolkit on CO alarms](#), co-produced with the Consumer Product Safety Commission, provides everything needed to motivate residents to install and maintain CO alarms. In addition, the [carbon monoxide safety page](#) includes safety tips and reports about the dangers of CO and preventative measures.



SAFETY SOURCE

BLOG

<https://community.nfpa.org/community/safety-source/overview>

NFPA's Safety Source blog features news and information created to reduce fire deaths, injuries, and property loss. [More NFPA safety information.](#) <http://www.nfpa.org/public-education>



State of Vermont Dept of Public Safety

Division of Fire Safety

www.firesafety.vermont.gov

CALENDAR OF FIRE EVENTS

July 2016

SUN	MON	TUE	WED	THU	FRI	SAT
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Date	Event	Location
4	Independence Day ~ State Offices Closed	ALL
12	Plumbing Board	BERLIN
25	Access Board	BERLIN



~BOARD DEADLINE REMINDER~

If you have a board agenda item, it needs to be received at the Central Office no later than 2 weeks prior to the board meeting. (for all boards – Access, Electrical, Elevator & Plumbing)

August 2016

SUN	MON	TUE	WED	THU	FRI	SAT
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Date	Event	Location
2	Electrical Board Meeting	BERLIN
9	Elevator Board Meeting	BERLIN
16	Battle of Bennington Day~ State Offices Closed	ALL
17	Division Training	BERLIN
29	Access Board Meeting	BERLIN

Battle of Bennington Day – August 16 Vermont State Holiday

In the late summer of 1777, the Continental Army beat a hasty retreat toward Bennington. British and Hessians pursued, but were badly in need of supplies.

The Americans, carrying what is believed to be the first American flag into battle, defeated them before they could reach the supply depot at Bennington.

The British were forced to proceed to Saratoga without the supplies, where they met a stunning defeat that turned the tide of the Revolutionary War.





State of Vermont Division of Fire Safety

JULY 2016

1311 US Route 302—Berlin Suite 600

Barre, VT 05641-2351

FIRESAFETY.VERMONT.GOV

*To be added to the monthly newsletter email
mailing list contact the Central Office
(802) 479-7561*

**REMEMBER Smoke Detectors, Fire Sprinklers and Carbon
Monoxide Detectors Save Lives**

Vermont Department of Public Safety

Division of Fire Safety

Central Office

1311 US Route 302— Suite 600
Barre, VT 05641-2351
Phone (802) 479-7561 Fax (802) 479-7562
Toll Free (800) 640-2106

HAZMAT Response Team

Phone (802) 479-7586
Fax (802) 479-7562
Toll Free (800) 641-5005

Vermont Fire Academy

93 Davison Drive
Pittsford, VT 05763
Phone (802) 483-2755 Fax (802) 483-2464
Toll Free (800) 615-3473

Regional Offices:

Williston

380 Hurricane Lane— Suite 101
Williston, VT 05495-2080
Phone (802) 879-2300 Fax (802) 879-2312
Toll Free (800) 366-8325

Barre

1311 US Route 302— Suite 500
Barre, VT 05641-7301
Phone (802) 479-4434 Fax (802) 479-4446
Toll Free (888) 870-7888

Rutland

56 Howe Street, Building A— Suite 200
Rutland, VT 05701
Phone (802) 786-5867 Fax (802) 786-5872
Toll Free (888) 370-4834

Springfield

100 Mineral Street— Suite 307
Springfield VT 05156-3168
Phone (802) 885-8883 Fax (802) 885-8885
Toll Free (866) 404-8883

DIVISION OF STATE POLICE—FIRE INVESTIGATION

Waterbury—45 State Drive, Waterbury, VT 05671-1300— (802) 244-8781—Fax (802) 241-5371